

Gr 1713

Practitioner's Docket No. 50773

**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of: Gore et al.

Serial No.: 09/960,662

Group No.: 1713

Filed: September 22, 2001

Examiner: T. Zalukaeva

For: POLYMER SYNTHESIS AND FILMS THEREFROM

Assistant Commissioner for Patents  
Washington, D.C. 20231

**AMENDMENT TRANSMITTAL**

1. Transmitted herewith is an amendment for this application.

**STATUS**

2. Applicant is

[ ] a small entity. A statement:  
[ ] is attached.  
[ ] was already filed.  
[X] other than a small entity.

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**EXTENSION OF TERM**

*NOTE: "Extension of Time in Patent Cases (Supplement Amendments) — If a timely and complete response has been filed after a Non-Final Office Action, an extension of time is not required to permit filing and/or entry of an additional amendment after expiration of the shortened statutory period.*

**CERTIFICATE OF MAILING/TRANSMISSION (37 C.F.R. 1.8(a))**

I hereby certify that, on the date shown below, this correspondence is being:

**MAILING**



deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

**FACSIMILE**

☐ transmitted by facsimile to the Patent and Trademark Office.

Signature

Date: 1/3/03

Deanna M. Rivnider  
(type or print name of person certifying)

## FEE FOR CLAIMS

4. The fee for claims (37 C.F.R. 1.16(b)-(d)) has been calculated as shown below:

(Col.1)		(Col. 2) (Col. 3) SMALL ENTITY				OTHER THAN A SMALL ENTITY			
Claims Remaining After Amendment		Highest No. Previously Paid For	Present Extra	Rate	Addit. Fee	OR	Rate	Addit. Fee	
Total	* Minus	**	=	x \$9 =	\$		x \$18 =	\$	
Indep.	* Minus	***	= 0	x \$40 =	\$		x \$80 =	\$	
[ ] First Presentation of Multiple Dependent Claim				+ \$135 =	\$		+ \$270 =	\$	
					Total Addit. Fee	\$	OR	Total Addit. Fee	\$

\* If the entry in Col. 1 is less than the entry in Col. 2, write "0" in Col. 3,

\*\* If the "Highest No. Previously Paid For" IN THIS SPACE is less than 20, enter "20".

\*\*\* If the "Highest No. Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest No. Previously Paid For" (Total or Indep.) is the highest number found in the appropriate box in Col. 1 of a prior amendment or the number of claims originally filed.

**WARNING:** "After final rejection or action (§ 1.113) amendments may be made canceling claims or complying with any requirement of form which has been made." 37 C.F.R. 1.116(a) (emphasis added).

(complete (c) or (d), as applicable)

- (c) ☒ No additional fee for claims is required.

OR

- (d) ☐ Total additional fee for claims required \$ \_\_\_\_\_.

## FEE PAYMENT

5. ☐ Attached is a check in the sum of \$ \_\_\_\_\_.
- ☐ Charge Account No. \_\_\_\_\_ the sum of \$ \_\_\_\_\_.
- A duplicate of this transmittal is attached.

## FEE DEFICIENCY

**NOTE:** If there is a fee deficiency and there is no authorization to charge an account, additional fees are necessary to cover the additional time consumed in making up the original deficiency. If the maximum, six-month period has expired before the deficiency is noted and corrected, the application is held abandoned. In those instances where authorization to charge is included, processing delays are encountered in returning the papers to the PTO Finance Branch in order to apply these charges prior to action on the cases. Authorization to charge the deposit account for any fee deficiency should be checked. See the Notice of April 7, 1986, (1065 O.G. 31-33).

*If a timely response has been filed after a Final Office Action, an extension of time is required to permit filing and/or entry of a Notice of Appeal or filing and/or entry of an additional amendment after expiration of the shortened statutory period unless the timely-filed response placed the application in condition for allowance. Of course, if a Notice of Appeal has been filed within the shortened statutory period, the period has ceased to run." Notice of December 10, 1985 (1061 O.G. 34-35).*

NOTE: See 37 C.F.R. 1.645 for extensions of time in interference proceedings, and 37 C.F.R. 1.550(c) for extensions of time in reexamination proceedings.

3. The proceedings herein are for a patent application and the provisions of 37 C.F.R. 1.136 apply.

*(complete (a) or (b), as applicable)*

(a) ☐ Applicant petitions for an extension of time under 37 C.F.R. 1.136  
(fees: 37 C.F.R. 1.17(a)(1)-(4)) for the total number of months checked below:

	<u>Extension (months)</u>	<u>Fee for other than small entity</u>	<u>Fee for small entity</u>
<input type="checkbox"/>	one month	\$110.00	\$ 55.00
<input type="checkbox"/>	two months	\$390.00	\$195.00
<input type="checkbox"/>	three months	\$890.00	\$445.00
<input type="checkbox"/>	four months	\$1390.00	\$695.00

Fee: \$ \_\_\_\_\_

If an additional extension of time is required, please consider this a petition therefor.

*(check and complete the next item, if applicable)*

☐ An extension for \_\_\_\_\_ months has already been secured. The fee paid therefor of  
\$ \_\_\_\_\_ is deducted from the total fee due for the total months of extension now  
requested.

Extension fee due with this request \$ \_\_\_\_\_

**OR**

(b) ☒ Applicant believes that no extension of term is required. However, this conditional  
petition is being made to provide for the possibility that applicant has inadvertently  
overlooked the need for a petition for extension of time.

6. [X] If any additional extension and/or fee is required, charge Account No. 04-1105.

**AND/OR**

[X] If any additional fee for claims is required, charge Account No. 04-1105.



SIGNATURE OF PRACTITIONER

Reg. No. 42,378

S. Matthew Cairns

*(type or print name of practitioner)*

c/o EDWARDS & ANGELL, LLP

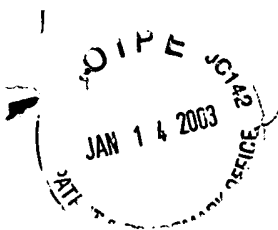
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PATENT

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DN 50773

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Gore et al.

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: Group Art Unit: 1713

: Examiner: T. Zalukaeva

#5  
Ineda  
1/27/03

RESPONSE

Assistant Commissioner of Patent and Trademarks  
US Patent and Trademark Office  
Washington, DC 20231

In response to the Official Action mailed on December 11, 2002, Applicants submit the following remarks.

REMARKS

Claims 1-32 are pending in the present application. The claims are subject to a restriction requirement as follows:

- I. Claims 1-9, drawn to a method of preparing cross-linked solution polymers;
  - II. Claims 10-16, drawn to a plurality of cross-linked solution polymer particles;
  - III. Claims 17-23, drawn to a composition comprising a B-staged dielectric material containing a plurality of cross-linked solution polymer particles;
  - IV. Claims 24-27, drawn to a porous dielectric material;
  - V. Claims 28-30 drawn to an electronic device containing a porous dielectric material;
- and

VI. Claims 31 and 32 drawn to a method of manufacturing an electronic device containing a porous dielectric material.

Applicants elect Group I, claims 1-9, with traverse. Groups I and II are related as process of making and product made. The Examiner posited that the polymers of Group II could be made by a materially different process, such as “emulsion polymerization process or reverse emulsion polymerization or polymerization in suspension.” However, Applicants claim 10 (the only independent claim in this Group) requires that the cross-linked polymer particles be solution polymer particles. See claim 10, line 1. Thus, they cannot be made by any of the polymerization processes indicated by the Examiner. Thus, Applicants respectfully request that Groups I and II be rejoined.

The claims of Group III are directed to a B-staged dielectric composition containing the cross-linked solution particles of Group II. Thus, no serious searching burden is placed on the Examiner and Applicants respectfully request that Groups II and III be rejoined.

Group IV is directed to a porous dielectric material having pores of a certain size. The claims of Group V are directed to an electronic device containing the porous dielectric material of Group IV. Thus, no serious searching burden is placed on the Examiner and Applicants respectfully request that Groups IV and V be rejoined.

Group V is directed to an electronic device containing one or more layers of a certain porous dielectric material. Group VI is directed to a method of manufacturing an electronic device containing the certain porous dielectric material. Thus, no serious searching burden is placed on the Examiner and Applicants respectfully request that Groups V and VI be rejoined. The Examiner also posited that the electronic device of Group V can be made by a materially different method such as by “applying the photoresist composition and/or ARC composition on the substrate, then etching the substrate to create an appropriate pattern, and then developing/removing photoresist material.” Applicants respectfully disagree. In the method posited by the Examiner, only a patterned substrate (or electronic device) is obtained. This method alone cannot produce a device containing a porous dielectric material. In contrast, the claims of Group VI specifically require that a dielectric material containing a pore forming (“porogen”) cross-linked polymer be applied to a substrate and that the porogen subsequently be removed to form a porous dielectric layer. Thus, Applicants respectfully request that Groups V and VI be rejoined.

Further, the Examiner posited that the inventions of Groups I, and III-VI are unrelated as the inventions as disclosed are not capable of working together. Applicants respectfully

disagree. As discussed above, Group I is directed to making certain cross-linked solution polymers. Group III is directed to a composition of a B-staged dielectric material containing certain cross-linked solution polymers. The B-staged dielectric composition of Group III is used to form a porous dielectric material. Group IV is directed to a porous dielectric material, such as that from Group III. Group V is directed to an electronic device that contains the dielectric material of Group IV. Group VI is directed to a method of making the electronic device of Group V. Accordingly, Applicants submit that the inventions of Groups I and III-VI are not unrelated.

Based on the foregoing, it is submitted that the search and examination of the entire application could be made without serious burden. See MPEP §803 which states that "If the search and examination of an entire application can be made without serious burden, the Examiner must examine it on the merits, even though it includes claims to distinct or independent inventions." It is respectfully submitted that this policy should apply in the present application in order to avoid unnecessary delay and expense to Applicants and duplicative examination by the Patent Office. Accordingly, Applicants respectfully request rejoinder of Groups I-VI.

Respectfully submitted,



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